

ABSTRACT OF THE DISCLOSURE

A liquid injector has a gripping detector disposed on the front face of a piston pusher for detecting when a piston is pushed by the piston pusher for thereby detecting when a piston flange on the piston is gripped by a pair of engaging claws on the piston pusher. The piston pusher is prevented from being actuated when the piston flange is not gripped by the engaging claws.